DOCUMENT RESUME

ED 141 850 CS 501 744

AUTHOR Murdock, Marianne
TITLE The Mondale Nomination: A Study in the Diffusion of Political Events.
PUB DATE 77
NOTE 29p.; Paper presented at the Annual Meeting of the International Communication Association (West Berlin, Germany, May 29-June 4, 1977)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Adults; Communication (Thought Transfer); *Diffusion; *Elections; *Information Dissemination; *Information Sources; Information Theory; Politics; Public Opinion; Research; *Speech Communication

ABSTRACT

One hundred thirteen residents of Carbondale, Illinois, participated in a study of the diffusion of information about the announcement of Walter Mondale's nomination as the Democratic vice-presidential candidate in the 1976 election. Data were collected the day of the announcement, for a period of ten hours. Results indicated that 76% of those asked were aware of the identity of the nominee. Interpersonal sources were most important in the diffusion of the information. The event was judged by the respondents to be more important than it was interesting. A multiple regression analysis showed that 93% of the variance in knowledge could be explained by seven independent variables: source of knowing, place of knowing, time of knowing, importance, interest, sex of the respondent, and age of the respondent. (Author/AA)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED141850

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE MONDALE NOMINATION:

A STUDY IN THE DIFFUSION OF POLITICAL EVENTS

Marianne Murdock
School of Journalism
Southern Illinois University-Carbondale

The author wishes to express her appreciation to Dr. Ronald Ostman of the School of Journalism of SIU for his support and assistance in this project.

Presented to the Political Communication Division of the International Communication Association at the annual convention, West Berlin, Germany May 29-June 4, 1977

CS 501 744

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

Marianne Murdock

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

ABSTRACT

This paper is a report of a study concerning the diffusion of information of the announcement of Senator Walter Mondale's (Democrat-Minnesota) nomination as the Democratic Vice-Presidential candidate in the 1976 United States Presidential election.

The data were collected the day of the announcement for a period of ten hours. The respondents were residents of Carbondale, Illinois, home of Southern Illinois University.

Results indicate that the information about the nomination did not diffuse to as great a percentage as immediately available events usually do. Seventy-six per cent of those asked were aware who the nominee was. Interpersonal sources were found to be the most important in the diffusion of the information. This finding runs counter to the findings of those studies which deal with immediately available events.

Perceived interest and importance of the event were measured. The event was judged by the respondents to be more important than interesting.

A multiple regression analysis of the data shows that 93 per cent of the variance in knowledge can be explained by the following independent variables: Source of knowing, place of knowing, time of knowing, importance, interest, sex of the respondent, and age of the respondent.

Discussion of these findings, as well as a proposed mathematical model of diffusion is presented.

THE MONDALE NOMINATION:

A STUDY IN THE DIFFUSION OF POLITICAL EVENTS

Introduction and Statement of the Problem

This paper presents data collected during a study of the nomination of Senator Walter Mondale of Minnesota to be the Democratic Vice-Presidential candidate in the 1976 Presidential election. This event was chosen because it provided the researcher with an opportunity to study diffusion of an anticipated event in a community.

Diffusion of innovations and of news events has long been a subject of study for social scientists. This paper is confined to the diffusion of political events in order to look more closely at the work which has been done by various communications researchers. The emphasis here will not be on adoption or behavioral changes. Adoptions of innovations are subjects of separate studies.

Katz, Levin, and Hamilton (1963) wrote about the comparisons between diffusion research as conducted by mass media researchers and other social scientists. These authors say that diffusion research in the United States has generally been confined to historical and descriptive research. They do, however, credit researchers with advancing some important generalizations about the generic aspects of diffusion.

Katz et al. point out that there have been basically two waves of diffusion research. The first, in the 1920's and 1930's, was concerned with diffusion of phenomena through the social structure. Such studies were concerned with the spread of city-manager plan of government, third party political movements, amateur radio as a hobby, and other areas. The authors suggest that this first wave of diffusion studies came to a halt because of the increasing interest in the study of communications behavior triggered by the advent of radio in the twenties and thirties.

This study of communications behavior was responsible, in part, for the inception of the second wave of diffusion studies which began in the late forties and fifties and continues to a limited extent even today. Concern with the effects of the mass media and the subsequent study of the

effects of the media have lead researchers to conclude that the media are not as all powerful in influencing people as was once believed. This coincides somewhat with the demise of the hypodermic needle theory. The study of effects has now broadened to take into account the social processes involved in the spread of influence and innovation, according to Katz et al. If the mass media are not as all-powerful as was originally thought the problem of understanding the fast rate at which new ideas and behavior travel through society still remains.

Rogers and Shoemaker (1971) say that diffusion research expands the conceptual basis of communications researchers. Rogers and Shoemaker maintain that diffusion research is concerned with the study of the very basic model of communications --the SMCRE model. The SMCRE model is the sender, message, channel, receiver and effect model. The comparison between the SMCRE model and the diffusion is shown in Figure 1.

Rogers and Shoemaker say that innovations have two components:

1. An idea component
2. a physical referent or object

The adoption of an innovation with an ideational component only is purely a symbolic adoption. News events have symbolic adoption.

The social structure acts to impede or facilitate the rate of diffusion and adoption of new ideas through what are called "system effects" (social norms). Rogers and Shoemaker say that the homophily of system norms contribute a great deal to adoption. The most effective communication occurs when the source and the receiver are homophilus (similar in values and system norms). Rogers and Shoemaker point out that one of the most distinctive problems in communications of innovations is that the source is usually quite heterophilus to the receiver of the communication.

Diffusion and adoption must be studied over some increment of time. Classically, rates of diffusion have been graphically plotted on a two-dimensional Cartesian co-ordinate system with time on the x-axis and cumulative involvement or percentage of knowers on the y-axis. Figure 2 shows the normal diffusion curve with the various stages of adoption or knowledge.

Recently diffusion researchers have been concerned with curves of diffusion similar to the one shown in Figure 2.

Review of the Literature

The first study of diffusion of a political event was conducted by Miller (1945) in connection with the unexpected death of the late President Franklin D. Roosevelt. Miller found that interpersonal sources accounted for the most diffusion of the information. Hyman and Shetsley (1947) followed with a study in which they defined those persons who are not aware of things as "chronic know-nothings." Hyman and Sheatsley concluded that being unaware follows a pattern, if a person is unaware once he is more likely to be unaware again.

Larsen and Hill studied the diffusion of the news of Senator Robert Taft's death. Larsen and Hill (1954) studied diffusion in two different populations in an effort to determine if educational level made any difference in patterns of diffusion. The researchers found that there was no difference in the percentage of those aware between the two samples. The more educated faculty sample was aware sooner than the other sample, but that was the only difference reported.

Danielson (1956) studied the diffusion of the news of the late President Eisenhower's decision to run for a second term in a highly educated, financially well-off sample of residents of Palo Alto, California. Danielson found that those persons who knew of the decision soonest were the ones who had heard from radio. Danielson was the the first to report use of the mass media as secondary or checking sources for diffusion of political events.

Deutschmann and Danielson (1960) reported the diffusion of four different events in three different communities. The events were the launching of Sputnik I, President Eisenhower's stroke, the launching of Explorer I, and Alaskan statehood. These researchers found a difference in diffusion patterns based on educational level and occupation. Deutschmann and Danielson concluded that the diffusion process is far more regular than was originally thought.

The assassination of President John F. Kennedy in Dallas, Texas, on November 22, 1963, provided diffusion researchers with an opportunity to study diffusion extensively. More studies were conducted on the diffusion of this event than any other.

Banta (1964) collected his data within nine hours after the shooting. This study showed that 82 per cent of the respondents were aware of the shooting before the President died.

Greenberg (1964a, 1965b) found similar occurrences. People were aware of the event very shortly after it had happened. Interpersonal sources were found to be the most important in the diffusion of the story.

Spitzer and Spitzer (1965) found similar results in their study of the Kennedy assassination and the killing of Lee Harvey Oswald.

Mendelsohn (1964) found that radio was the most often cited source of first knowledge of the assassination. Mendelsohn collected his data in Colorado two weeks after the event. Some critics have argued that this was long enough for loss of memory to have set in, and that this does not reflect what truly went on concerning the diffusion of this event.

Hill and Bonjean (1964) tested five regularity hypotheses in connection with their research. The topic of the research was the Kennedy assassination. The five hypotheses were:

1. Diffusion rates follow about the same pattern.

2. Television plays the major role in delivering important news. Radio ranks second followed by personal contact and newspapers.

3. Time of the day, nature of the study, and other factors do not significantly alter the first exposure pattern.

4. Education, occupation, and sex are related to original source of news. The uninformed differ from the informed with regard to education and occupation.

5. Most people learn of news in their home, "home bound" media are television, newspapers, and radio in that order.

These hypotheses are significant in that they are the first that were proposed in connection with diffusion research. Parts of these hypotheses guided the basic plan of research for this study.

Researchers Danbury and Berger (1965) and Budd, MacLean, and Barnes (1966) were concerned with the study of three events each of which occurred in rapid succession of the other. The events were the Walter Jenkins case (Jenkins was a former aide to President Johnson who had been booked on a morals charge), the ouster of Nikita Khruschev, and the announcement that Communist China has just exploded her first nuclear device.

Both studies found support for the idea that the greater the news value of the the stories the more interpersonal diffusion there would be. The problem here is one of how news value is judged. This is a problem which still plagues diffusion research.

Allen and Colfax (1968) reported on the diffusion of the information that President Johnson would not seek a second term

in office. Because the events was carried live on television, the great majority of people became aware of the event as a result of viewing the broadcast. The authors maintain that instant saturation by the media can make interpersonal sources less important in diffusion.

Hirsch (1975) studied the diffusion of the Johnson retirement and the assassiatnion of Dr. Martin Luther King. Hirsch maintained that more people would hear of the King assassiatnion through interpersonal channels than through the mass media as it was an unexpected event not covered live by the mass media. Hirsch found support for some of the regularity hypotheses proposed by Hill and Bonjean (1964).

Sohn (1975) studied the diffusion of the resignation of President Richard M. Nixon in August of 1974. The study was conducted in a small town in Southern Illinois. Sohn found that the news of the resignation diffused immediately to 76.8 per cent of the sample. Eighty-one per cent of the knowers got their information from television. Only 8.0 per cent got their information from an interpersonal source. This finding runs counter to the Hill and Bonjean hypothesis, which says that an event of "great" importance will diffuse primarily through interpersonal channels. Again, there is the problem of the definition of importance of an event. Rosengren (1971) has proposed a news value index that would deal with the problem of definition of news value of an event.

Work has been going on in the area of mathematical models of diffusion. Tannenbaum and Greenberg (1968) summarize much of the work done in this area. Chaffee (1975) applies much of the work which has been done with the mathematics of diffusion to the area of political communications. Dodd (1953) presented probably the first model of diffusion from a strictly mathematical point of view. Coleman(1964) and Rapoport (1956, pp. 48-55) report on a series of equations which deal with the mathematics of diffusion and which form the basis for the most advanced model to date-the Funkhouser(1970) model.

Funkhouser (1970) presents probably the most mathematically sound model to dat. The first assumption of the Funkhouser model is that the probabilities of exposure to news are known for every hour of the day. Before the media disseminate the news the proportions of the population that has heard the news is zero, in most cases. When this is true, $P_0=0$. After the first hour, the proportion of those exposed will equal the probability of being exposed, $P_1=p_1$. For hour two, the proportion of those exposed will be equal to the probability of being exposed at time one plus the probability of being exposed at time two times the probability of not being exposed at time one $(1-p_1)$. Algebraically expressed, this relationship over a series of $\underline{n}$ time increments, will be:

$$P_t = 1.0-(1-p_0)(1-p_1)(1-p_2)(1-p_3)\ldots(1-p_t).$$

Inherent in this model is the notion that when there is no probability of exposure at any one time, $p_t=0$, the proportion will remain the same. If $p_t=1.0$, every member of the population is a knower.

Coleman's model of diffusion looks at talking per unit of time. Funkhouser chose to use Coleman's model as a basis from which to operate in formulating his model of interaction patterns of diffusion. It will be recalled from Coleman's model that the discussion equation is:

$$x=n(1-e^{-kt})$$

where x=the number of knowers, t=time, k=constant of proportionality, and e=the natural log constant, 2.718. This equation applies when p_t is always equal (the probability of exposure is always the same). If this is the case in the population being studied, then the total proportion of knowers can be expressed by this equation:

$$P_t=1.0-(1.0-p)^t$$

According to this model if one knows the exposure probabilities over a certain series of time t increments, the patterns of diffusion can be predicted through a population. This model carries certain assumptions:

1. The news must be highly interesting to all members of the audience.

2. If exposed to the news, a person will notice it.

3. If he notices the news, a person will comprehend it.

4. If he comprehends the news, a person will remember it.

5. The exposure probabilities for the audience must be known for all successive time increments over which the diffusion is taking place.

6. The exposure of members of the audience during any hour is independent of expsoure during other hours. This assumption would be violated, for example, in the case of an event which causes people, upon first hearing it, to seek further information or to actively disseminate the news to other people.

7. The exposure probabilities for any hour must be the same for people who have already heard the news as they are for those who have not yet heard it (Funkhouser, 1970, p. 43).

Funkhouser was concerned about incorporating interest into the diffusion model. If it is assumed that interest scores can run on a scale from 1.0 (complete interest) to 0 (no interest), this part of the model can be mathematically formulated. According to Funkhouser, interest is important at two points in the diffusion process, perception and retention.

The exposure probabilities can be weighted by the interest factor, I, in this fashion,

$$p' = Ixp$$

To determine the relationship between interest and retention, assume a proportion of knowers, P_0, and some interest score I. To determine the proportion of knowers in the first hour the equation then becomes:

$$P_1 = I \times P_0 + p_1' \ (1.0 - I \times P_0)$$

The general form of this equation is:

$$P_t = (I \times P_{t-1}) + p_t' \ (1.0 - I \times P_{t-1})$$

Individual probabilities can be expressed in this fashion:

$$P = \frac{I}{1.0 - I(1.0-I)}$$

The Funkhouser model takes into account interest which no other model has ever done. In this respect, it is perhaps superior to any other model of diffusion proposed. However, this model is severely limited by its assumptions. Exposure probabilities for every member of the population would be very hard to collect. It would be possible to have estimates only. One would have the sample data which should be generalizable to the population.

Funkhouser and McCombs (1971) tested the Funkhouser model on two different occassions. The authors proposed a variation in the classic methodology for collecting diffusion data. Instead of asking what events a person was aware of, respondents were asked to tell where and when a certain event has occurred. Thus the researchers were assured of having "knowers" who actually knew of the event, rather than persons who may just have guessed at a response. Funkhouser and McCombs studied the diffusion of the news of a human heart transplant operation

at Stanford University, a prison riot in Ohio, and the nomination of Justice Abe Fortas to be Chief Justice of the United States Supreme Court. News of the operation diffused in a normal fashion with an ever increasing percentage of knowers. The Fortas nomination story reached a peak, slumped for awhile , and then reached a higher level of diffusion. The Ohio prison riot story showed "negative diffusion." That is, as every hour passed fewer and fewer people were aware of the event.

The same methodology was used by Funkhouser and McCombs in a diffusion study in North Carolina. The stories being studied were the discovery of the hull of the submarine Scorpion, and the announcement that the military draft in the United States would be conducted on the basis of a lottery system.

The Scorpion story went steadily up for a period of time and then dropped, but rose again. The draft lottery story experienced "negative diffusion." The Funkhouser model, unlike any other model, provides for negative diffusion. Negative diffusion is the result of certain psychological

or demographic variables which are not taken into account in the equation, therefore the model should perhaps be modified to include these factors. Further testing would be necessary in order to determine what these factors are. More studies need to be conducted which deal with "negative diffusion."

Objectives

The objectives of this project were to first learn more about diffusion from a mathematical point of view, and to examine more closely the diffusion of political information.

The hypotheses are:

1. The diffusion curve will look very much like the s or normal curve of diffusion.

2. Source, place, time, interest, importance, sex, and age all contribute significantly to the prediction of knowledge of an event.

Procedure

The data were collected in Carbondale, Illinois, on July 15, 1976 between 11:00 AM and 9:00 PM. The respondents were 113 persons chosen at "random" by the researcher. No random selection procedure was set up before the event occurred so the sample is not random in the traditional sense of the word. Respondents were obtained from nearly every walk of life from student and faculty at Southern Ilinois University-Carbondale to prisoners at the Menard Correctional Facility at Chester, Illinois.

The announcement of Sen. Mondale's nomination was made by Democratic Presidential Candidate, now President, Jimmy Carter. The announcement was made at 9:03 AM Eastern Daylight Savings Time in New York City, New York. The announcement was carried live by all of the radio and television networks. The researcher was out in the field two hours after the nomination was announced.

Results

The results of this study are somewhat limited in their analysis in that random sample data were not collected and inferential statistics used here should be viewed in light of this limitation.

There were 86 knowers of the event (76.1 per cent), and there were 27 non-knowers (23.9 per cent). This is not quite as high as has been reported by earlier researchers who were

dealing with an event which has been carried live on the television and radio.

Forty-five or 39.8 per cent of the respondents reported their first source as being interpersonal. Forty-one or 36.3 per cent reported the mass media as their first source. (This would only be electronic media as no one reported learning of the nomination via newspapers.) Twenty-seven or 23.9 per cent responded that they didn't remember where they got the news.

Sixty-six reported being at work or at school when the event was announced. This accounted for 58.4 per cent of the responses. Twenty or 17.7 per cent reported being at home when they learned of the event.

Time of learning of the event ranged from immediately to ten hours after the event was announced. The median time for knowing was 90 minutes. The mean time for knowing was 365.894 minutes, or 6.0082 hours. (This figure includes those reporting not knowing about the event.)

Subjects were asked their interest in the event. The mean score for interest was 5.018. (Interest was measured on a seven point scale with one being not at all interested and seven being very interested.)

Subjects were also asked to rate the importance of the event. The mean score for importance was 6.062. This was on the same scale as interest. The event was viewed as being more important than interesting. The frequencies for interest and importance are shown in Table 1. (See Table 1.)

The aim of this research was to contribute somewhat to the mathematical model of diffusion. In keeping with this, the curve of the diffusion was plotted. This curve which shows time plotted against cumulative percentage of knowers should, according to Chaffee(1975), resemble the s-curve if all things are normal in the diffusion. As shown in Figure 3, this curve does not look at all like the s-curve. There are too many completely vertical jumps for the locus of the graph to be similar to the locus for the normal or s-curve. The equation of the curve was not computed, however, it is some variation of an exponential function with constants added on. Figure 4 illustrates time versus knowers when the first source was interpersonal. This is a much smoother curve. It resembles the s-curve somewhat except for the fact that it starts above the origin, but it does look very smooth from that point on. Figure 5 shows the curve of time versus knowers when mass media are the first source of the information. The curve is very different from the normal curve. From ninety minutes on the function is almost a linear one. While the graphic inspections of the curves do not constitute a test of a hypothesis, it does give some indication of what is happening with the data in relation to the normal curve of diffusion.

Those who rated the event as being not at all interesting learned of the event in an average of 348.00 minutes. Those who rated the event a "2" in interest learned of the event in 159.00 minutes. Those who rated the event a "3" learned in 232.00 minutes. Those who rated the event a four in interest learned of the event in 345.00 minutes. Those who rated the event a five in interest learned of the event in 269.857 minutes. Those who rated the event a six in interest learned of the event in 81.10 minutes. Those who rated the event a seven in interest learned of the event in 56.346 minutes. This would seem to suggest that the time of knowing becomes shorter as the interest increases in the event.

As indicated earlier in the hypotheses a multiple regression analysis was performed in order to determine which variables contribute the most to prediction of knowledge of the event. The variables entered into the equation were source, place, time, interest, and importance. The demographic variables were sex and age. The above variables yielded a an R-square value of .93183. This would mean that these variables account for 93.183 per cent of the variance in knowledge of the event. The regression is:

$$Y' = .97580 - .00066AGE + .05524SOURCE + .04214PLACE + .00015TIME - .00613INTEREST + .00539IMPORTANCE - .02415SEX$$

When the full model, as listed above is compared with the restricted model, where $Y' = a_2$ and $R^2 = 0$, the F-ratio is 207.96875. With degrees of freedom 7 and 105 this result is statistically significant at the .001 level.

When individual predictors are tested against the full model, source, place, time, and interest are all significant. The R^2 values and the F-ratios are all indicated in Table 2. (See Table 2.)

These data were analyzed using only those persons who were knowers of the event. This was done because one of the requirements of multiple regression analysis is that there is only one dependent variable. In this case there are two dependent variables, knowers and non-knowers. The most appropriate statistical test to be used here would have been multiple discriminant analysis. This would have indicated how correctly the independent variables discriminated between the knowers and the non-knowers.

Conclusions

This study of the diffusion of the announcement of the nomination of Senator Walter Mondale exhibited all of the previous findings of diffusion plus some new ones. It is interesting to note the lack of complete diffusion of the story

in light of the previous findings that immediately available events diffused to large numbers of the population. Perhaps it could be suggested that the Mondale study had diffused as far as it was going to. Perhaps there reaches a point in all stories when they have simply diffused as far as they are going to. One hundred per cent diffusion may not be possible in all stories. This is an assumption which has long plagued diffusion researchers.

The difference between the diffusion of this event and others like it may be due to the different type of question being asked. This study asked the question, "Who is the Vice-Presidential nominee of the Democratic party?" Classically diffusion researchers have asked only if the person was aware of an event. This may have caused many of the findings of those previous studies to be based on incorrect data. The methodology employed here was suggested and used by Funkhouser and McCombs (1971).

This study indicates that interest and importance should receive more attention as variables in diffusion studies. The role that these variables played in the regression analysis was particularly interesting.

As suggested in the literature review, most work needs to be done in the area of a news value index. Only then will it be possible to say that one event diffuses in some fashion according to the value which the story has.

Finally, the area which commands greatest attention as shown by this study is the area of the mathematics of diffusion. The models as presented are mathematically very sound, but provide little room for practical application because of the nature of their assumptions.

Perhaps a new model should be proposed. First it would be necessary to perform more research in order to determine some of the problem areas. This may seem the wrong way to go about formation of a new model, but it has occurred to this author in the course of this study that this is perhaps the best way to proceed for the present time.

Once some mathematical model of diffusion, which takes into account interest, importance, time, place, source, demographic variables, probability of exposure, and other variables, has been formulated than it will be possible to learn more about the diffusion of classes of events.

It can perhaps be said that such a model would include probability of exposure. This probability of exposure would be a function of some arithmetic combination of interest, importance, source, place, and demographic variables. Because diffusion usually rises quickly when graphed on a Carterian co-ordinate system, one could probably assume that the function would be an exponential one. This would mean that knowers would vary according to time with time being some exponential function of the equation. A very rough equation might look something like this:

$$\frac{dx}{dt} = kx(N-x)\ P(\text{exposure})$$

Where P(exposure) = interestXimportanceXsourceXplaceXdemographic variables

This model is very rough and needs a great deal of work, however, it is a start. The literature would indicate that there is a need for a mathematical model of diffusion if diffusion research is to make further contributions to knowledge about uses of the mass media as sources of information about crisis and non-crisis events.

Figure 1. Comparison of SMCRE Model and Diffusion process

SMCRE Model	Diffusion
Source	Inventors/opinion leaders
Message	Innovation
Channel	Communication Channels Mass media/interpersonal
Receiver	Members of a social system
Effect	Consequences over time 1. knowledge 2. attitude change 3. behavioral change

Source: E. M. Rogers and F. F. Shoemaker, Communications of Innovations, 1971, p. 20.

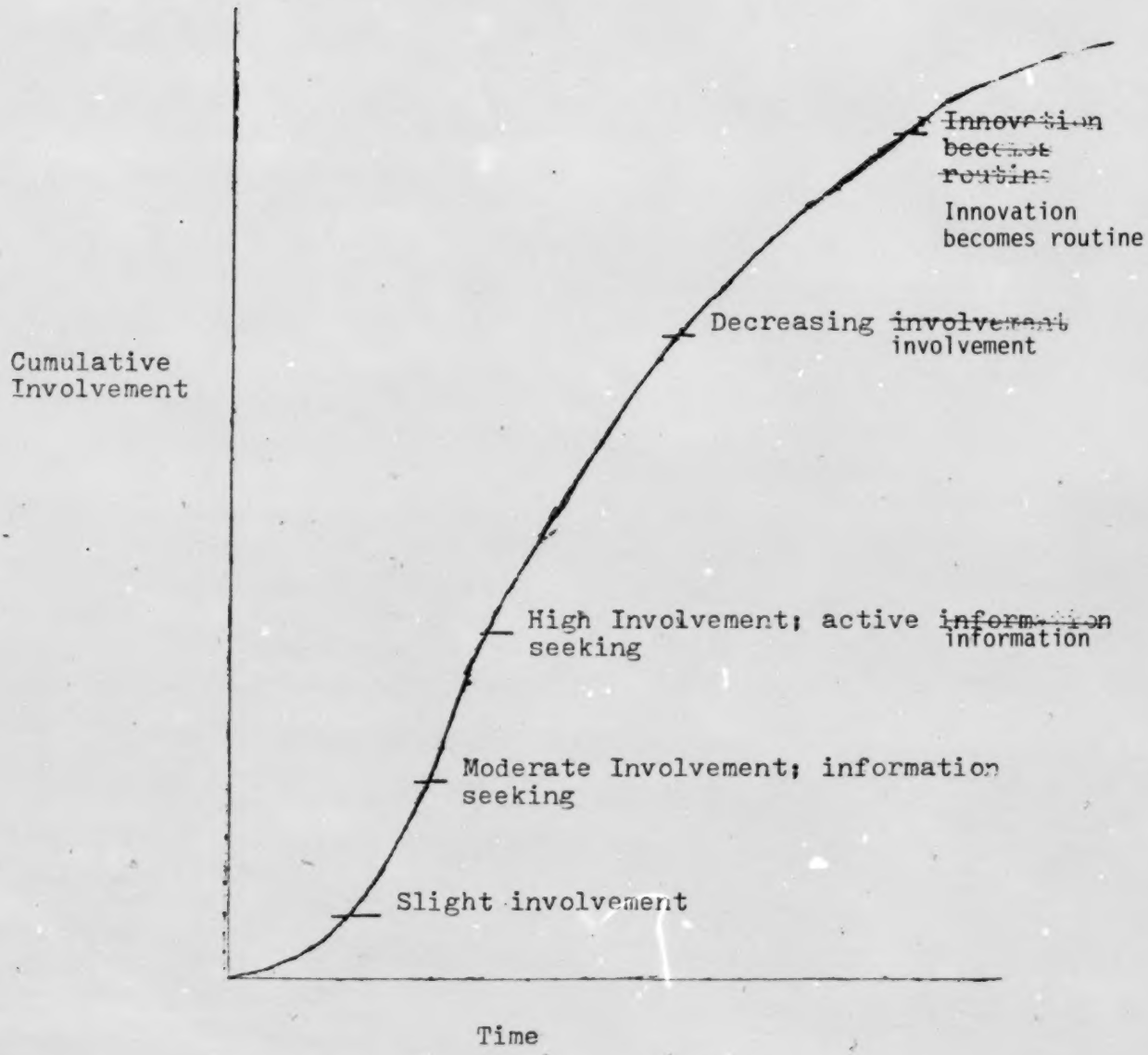

Figure 2. The Normal curve of diffusion

Source: R. G. Havelock, Planning for Innovations. 1971, p. 10-8.

Figure 3

Graphic Representation of Diffusion

Time versus Cumulative Percentage of knowers

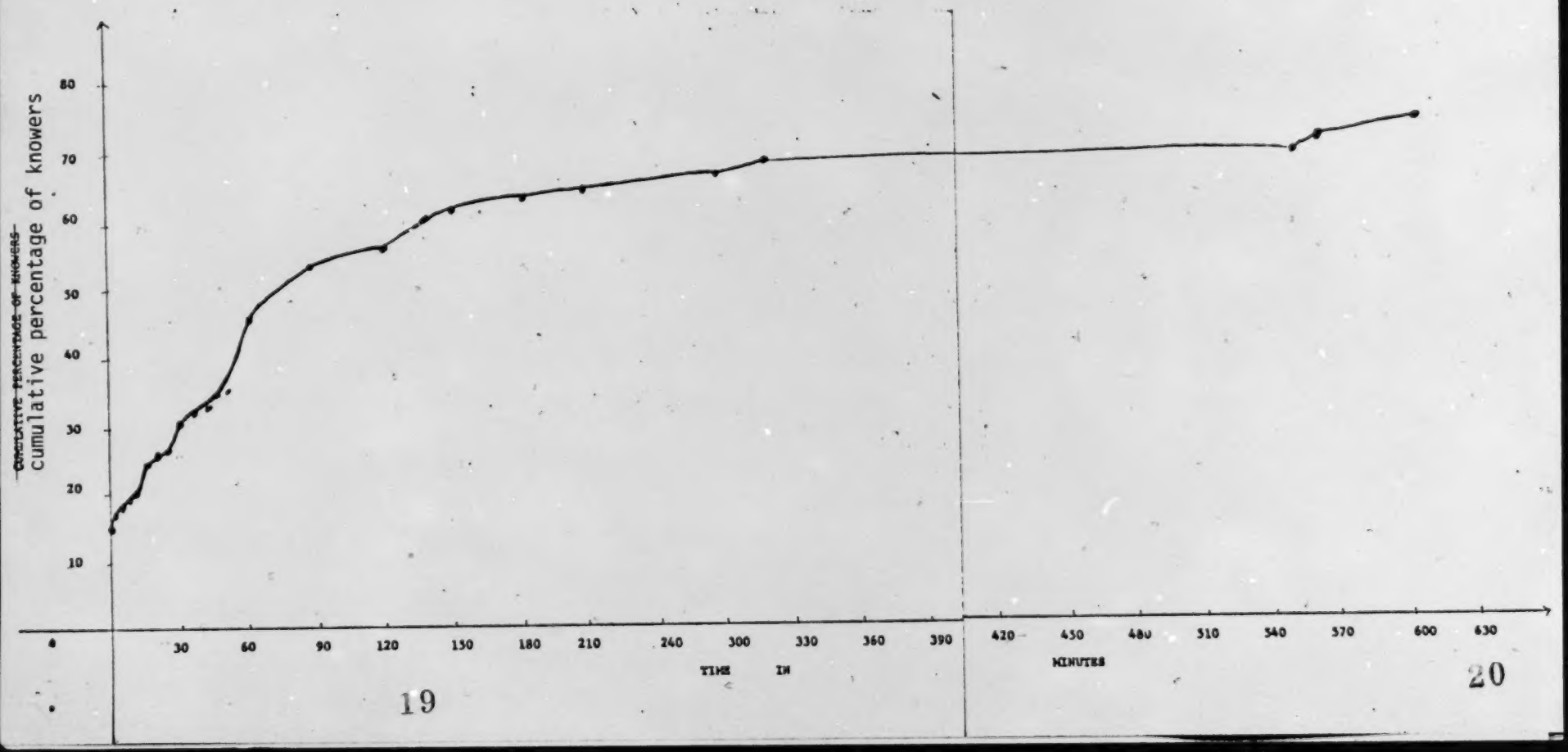

Figure 4

Time versus percentage of knowers

interpersonal as first source

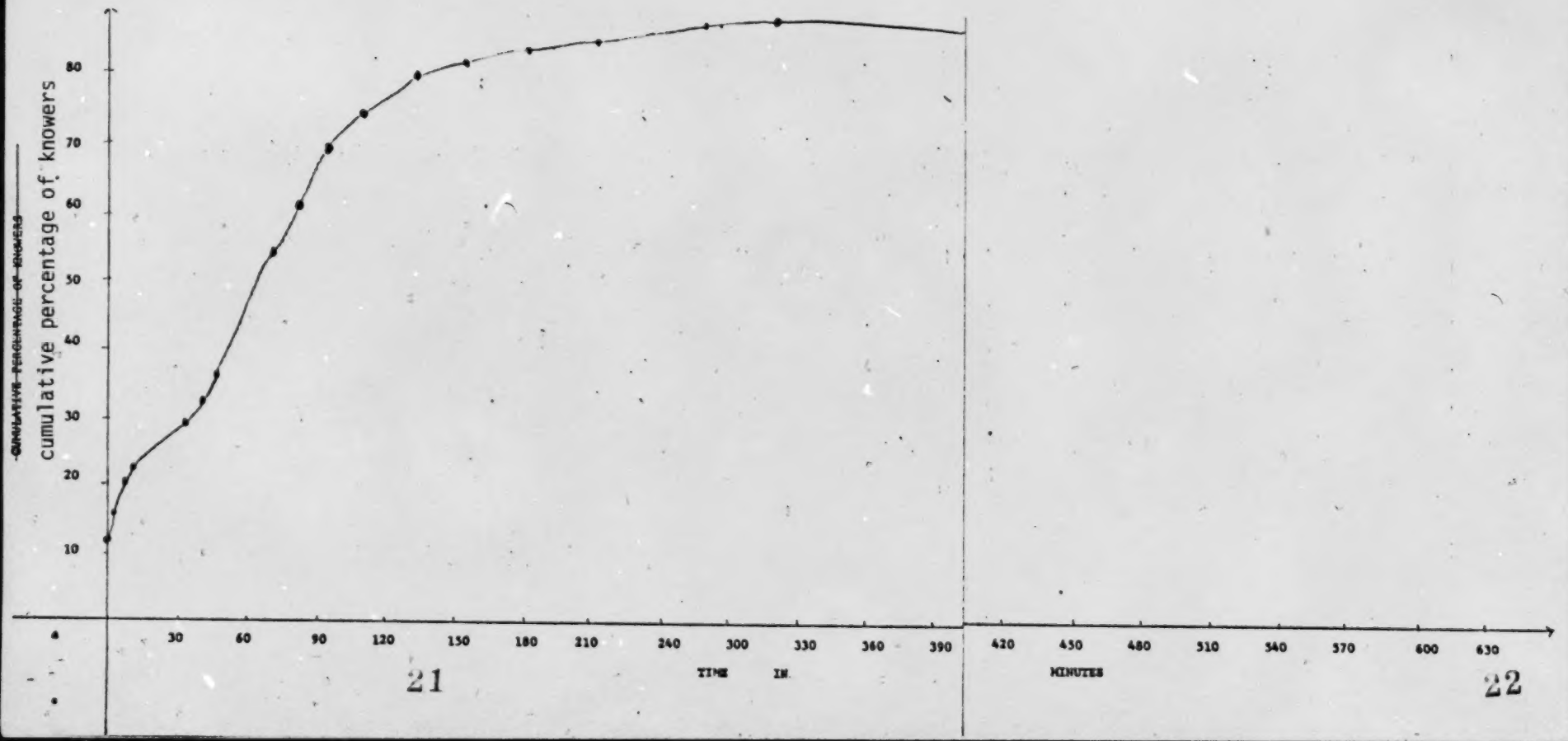

Figure 5

Time versus percentage of knowers

Mass media as first source

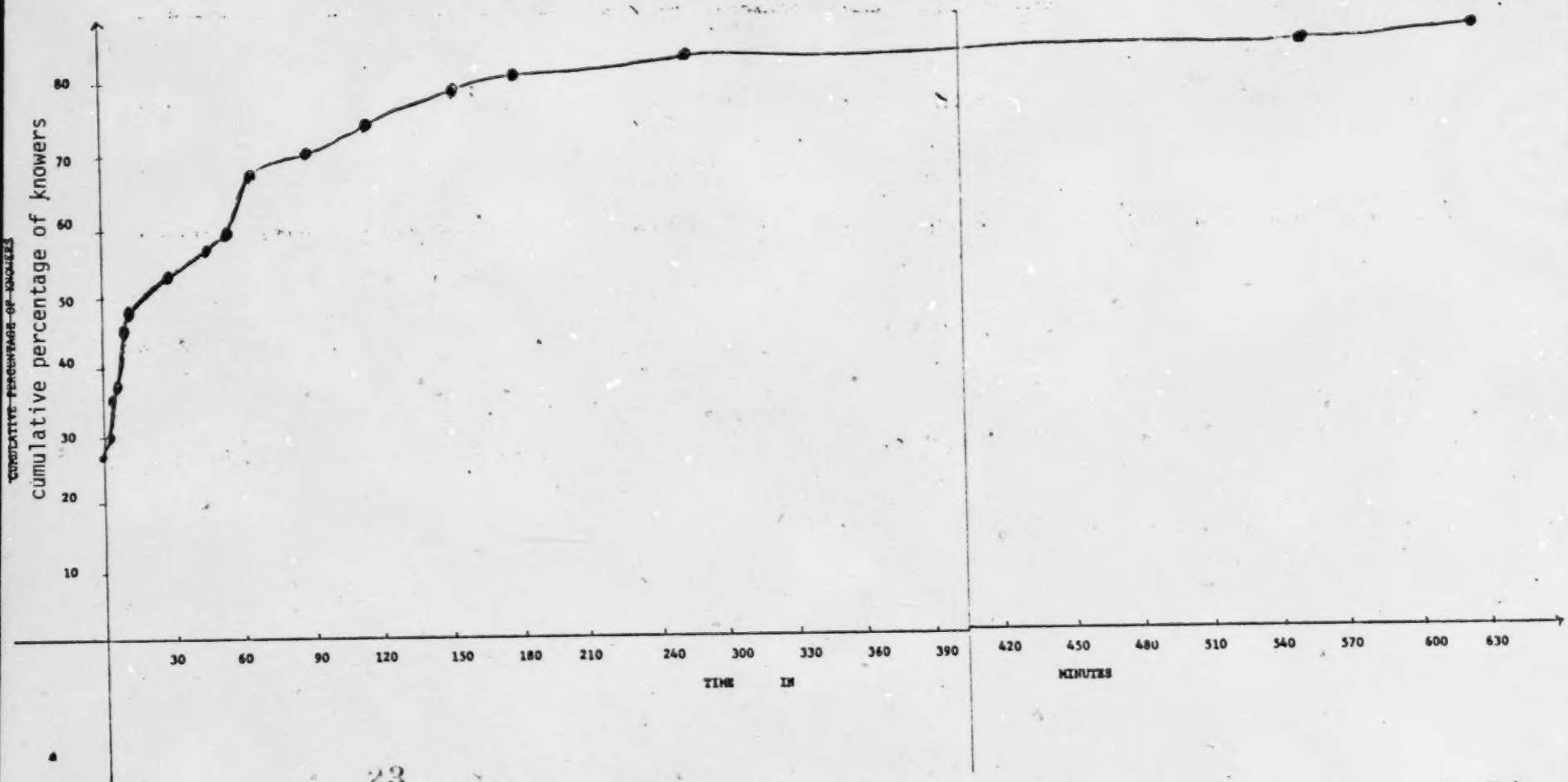

Table 1

Frequency of Interest and Importance

Score	Frequency
Interest	
1	8
2	6
3	8
4	20
5	18
6	22
7	29
9 (missing data)	2
Importance	
1	3
2	6
3	8
4	4
5	10
6	14
7	58
9 (missing data)	10

Table 2

R^2 values and F-ratios of Independent variables in Regression equation

Variable	R^2	F-ratio
Source	.90983	34.375*
Place	.91921	19.719*
Time	.92468	11.170
Importance	.93136	.734*
Interest	.92124	16.545
Sex	.93119	1.00
Age	.93161	.66

* indicates a statistically significant value

SOURCES CONSULTED

Allen, I. L., & Colfax, J. D. The diffusion of news of LBJ's March 31 decision. Journalism quarterly, 1968, 45, 321-324.

Banta, T. J. The Kennedy assassination: Early thoughts and emotions. Public opinion quarterly, 1964, 28, 216-224.

Budd, R. W., MacLean, M. S., & Barnes, A. M. Regularities in the diffusion of two major news events. Journalism quarterly, 1966, 41, 221-230.

Danbury, T., & Berger, C. The diffusion os political information and its effect on candidate preference. A paper presented at the meeting of the Association for Education in Journalism, Syracuse, N. Y., August 1965.

Chaffee, S. H. The diffusion of political information. In S. H. Chaffee (Ed.) Political communication. Beverly Hills: Sage Publications, 1975.

Coleman, J. S. Introduction to mathematical sociology. Glencoe: The Free Press, 1964.

Danielson, W. Eisenhower's February decision: A study of news diffusion. Journalism quarterly, 1956, 33, 433-441.

Dodd, S. Testing message diffusion in controlled experiments charting the distance and time factor in the interaction hypothesis. American sociological review, 1953, 18, 410-416.

Funkhouser, G. R., & McCombs, M. E. The rise and fall of news diffusion. Public opinion quarterly, 1971, 35. 107-113.

Funkhouser, G. R. A probabilistic model for predicting news diffusion. Journalism quarterly, 1970, 47, 41-46.

Greenberg, B. S. Diffusion of news of the Kennedy assassination. Public opinion quarterly, 1964a, 28, 225-232.

Greenberg, B. S. Person-to-person communication in the diffusion of news events. Journalism quarterly, 1964b, 41, 489-494.

Havelock, R. G. Planning for innovations. Ann Arbor: Center for research on utilization of scientific knowledge, 1971.

Hays, W. G. Statistics for the social sciences. New York: Holt, Rinehart, and Winston, 1973.

Hill, R. J., & Bonjean, C. M. News diffusion: A test of the regularity hypothesis. Journalism quarterly, 1964, 41, 336-342.

Hirsch, K. W. Diffusion and consistency of media source: The news of LBJ and Martin Luther King. A paper presented at the Meeting of the International Communication Association, Chicago, April 1975.

Hyman, H. H., & Sheatsley, P. B. Some reasons why information campaigns fail. Public opinion quarterly, 1947, 11, 413-423.

Katz, E., Levin, M. L., and Hamilton, H. Traditions of research in diffusion of innovations. American sociological review, 1963, 28, 237-252.

Larsen, O. N., and Hill, R. J., Mass media and interpersonal communication in the diffusion of a news event. American sociological review, 1954, 19, 426-433.

Mendelsohn, H. Broadcast VS. personal sources of information in emergent public crises: The presidential assassination. Journal of Broadcasting, 1964, 8, 147-156.

Miller, D. C. A research note on mass communication. American sociological review, 1945, 10, 691-694.

Rapoport, A. The diffusion problem in mass behavior. In General systems yearbook of the Society for the Advancement of General Systems Theory, Vol. I, pp. 48-55. Ann Arbor: Braun-Brumfield, 1956.

Rogers, E. M., & Shoemaker, F. F. Communication of innovations, second edition. New York: The Free Press, 1971.

Rosengren, K. E. Diffusion of news. Stockholm, Sweden: Berenshapsnamnden far Psylologist farseor, 1971.

Rosengren, K. E. Diffusion of news: An overview. Journalism quarterly, 1973, 50, 83-91.

Sohn, H. L. News diffusion in the Nixon resignation story: A study in media use patterns. Unpublished master's thesis. Southern Illinois University, Carbondale, 1975.

Spitzer, S. P., & Spitzer, N. Diffusion of news of the Kennedy and Oswald deaths. In B. S. Greenberg and E. P. Parker (Eds.) The Kennedy Assassination and the American public. Stanford, Calif.: Stanford University Press, 1965.

Tannenbaum, P. H., & Greenberg, B. S. Mass Communication. Annual review of psychology, 1968, 19, 367-369.